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The City in the Islamic World

Volume 1



Edited by
Salma K. Jayyusi,
Renata Holod,
Attilio Petruccioli and
André Raymond

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On the cover: Vertical aërophoto of the two sides of the river and the médinas of Rabat and Salé. Archives of the Ministry of Housing and Urbanism.

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ALGIERS IN THE OTTOMAN PERIOD: THE CITY AND ITS POPULATION

Federico Cresti*

Introduction

Amongst the topics concerning Algiers in the Ottoman period over which historians and researchers still debate, often taking up widely differing positions, undoubtedly one of the most interesting concerns its population. Indeed, in the last few decades many scholars have dealt with this topic; and it is one which is important for anyone interested in the city in the Muslim world during the Ottoman period. Furthermore, from a more general, historiographic viewpoint, it has significant implications for the collocation of Algiers within the framework of events in the Mediterranean between the sixteenth and nineteenth centuries, as well as for its importance as a territorial capital of the Ottoman Regency.

On this occasion I shall return to research begun several years ago, part of the results of which have already been published,¹ though there is still ample room for further hypotheses. My purpose here is to state precisely the terms of the debate, to review in detail the present state of research and, as far as possible, to add some further, little known, elements.

It might be useful to recall some geographical and historical facts that constitute a frame of reference and form the basis for any other considerations on the printed sources or on the archival documents available. First of all, the size of the city in the Ottoman period.

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It is well known that after Khayr al-dīn "Barbarossa" seized power and recognised the Sultan of Constantinople as his sovereign (1518) the fortifications of the city were adapted to the new defence requirements and their perimeter enlarged.² Even though we do not know the exact size of the al-Jazā'ir of Banī Mazghanna, the defensive walls of the Ottoman period covered a larger surface area than those of the preceding period. Moreover, the city was given new port structures, which in the following decades would make landing easier, giving rise to a period of prosperity, based mainly on an increase in privateering. Within the perimeter of the walls the surface area of the city measured at least 45 hectares.³ We should recall that this area did not notably

² The chronicle of this episode recounts that Hasan Agha, the successor of Khayr al-dīn as Governor of Algiers, had the walls rebuilt and the damaged parts repaired, providing them with batteries of canons (R. Basset, *Documents musulmans sur le siège d'Alger en 1541* [Paris and Oran, 1890], 20–21). The fortifications of the city had been repaired several times in the past, if we are to believe Leo Africanus (who visited Algiers in 1515 during one of his journeys): in his *Description of Africa* he speaks of rebuilding the city walls with the stones of Tamendfust (Jean-Léon l'Africain, *Description de l'Afrique*, French translation by A. Epaulard [Paris, 1981], p. 352). Nevertheless the text does not specify the period of the reconstruction. I have suggested elsewhere that this took place in the Zayyānid period in the course of the fourteenth century (see F. Cresti, "Note sullo sviluppo urbano di Algeri dalle origini al periodo turco," *Studi Magrebini* [henceforth: SM] 12 [1980], 115). Arūj had already begun work on improving the defence of the fortress ("the Kasbah, which in that period was the only fortress in Algiers") according to the *Epitome de los reyes de Argel* by Diego de Haedo ("Histoire des Rois d'Alger," French translation by H.-D. De Grammont, *Revue Africaine* [henceforth: RA] 24, no. 139 [1880]: 58). The work on the fortifications continued throughout the sixteenth century, and more episodically in the course of the following centuries.

³ "Son développement, mesuré sur les remparts, est d'environ 3.000 m, sa superficie de 415.000 mc" (Archives du Service Historique de l'Armée de Terre, Vincennes, Génie, Algérie, art. 8, sec. 1, cart. 2, no. 1: *Mémoire sur la Place d'Alger par le Chef de Bataillon Collas*, 1830 [henceforth: *Mémoire Collas*], 2; according to Rozet the city had an extension of c. 53 hectares (P. Rozet, *Voyage dans la Régence d'Alger, ou description du pays occupé par l'Armée française en Afrique* [...], 3 vols. [Paris, 1833], *passim*); according to Lespès "la superficie de la ville turque [était] sans la citadelle de la Casbah, de 41 hect. 1" (R. Lespès, *Alger. Étude de Géographie et d'Histoire urbaines* [Paris, 1930], 524, note 3). In his first article on the subject Raymond takes up the data provided by Lespès (A. Raymond, "Signes urbains et étude de la population des grandes villes arabes à l'époque ottomane," *Bulletin d'Études Orientales*, no. 27 [1974]: 185) and later states that its surface areas was 46 hectares (Id., *Grandes villes arabes à l'époque ottomane*, [Paris, 1985],

increase over the following decades, not because there was no need for more space on which to build, but for military reasons. We know that during the pashadom of 'Arab Ahmad (1573) the city had begun to expand to the south, outside Bāb Azūn, with the formation of a suburb that was later destroyed for defence reasons.⁴

The Importance of Immigration in the Early Ottoman Period

Scholars generally agree⁵ over the reasons for an increase in the population of Algiers in the early Ottoman period, which was due mainly to the immigration of Muslims forced to leave the Iberian peninsula in the last phases of the Christian conquest. A phenomenon which had certainly begun before the arrival of the Turks, but was accentuated at the time of 'Arūj and Khayr al-dīn's capture of the city, or in any case in the first two decades of the sixteenth century. Diego de Haedo, who was in Algiers around 1580 and who later published a crucial work for our knowledge of the city in this period, writes:

The fourth category of Moors [in Algiers] is made up of those who came here from the kingdoms of Granada, Aragon, Valencia and Catalonia, and who continue to come here today from Marseilles and other French ports whence it is easy to embark. They can be divided into two groups: the Mudejares who have left Granada and Andalusia, and the Tagarinos who come from the kingdoms of Aragon, Valencia and Catalonia. These Moors are white-skinned and well-proportioned, as are all those who come from Spain. They exercise a great number of different professions and every one of them is skilled in some craft: from those who make harquebus, gunpowder or saltpetre to locksmiths, carpenters and masons, tailors, shoemakers, potters, and so on. Many breed silk-worms or own shops in which all kinds of merchandise are sold [...] They dress like Turks [...] In Algiers there are about a thousand houses of these Andalusian Moors.⁶

41). The discrepancy between the above-mentioned figures (from 41.5 hectares to c. 60 hectares) is conspicuous. It would be useful to verify the different calculations in

It is interesting to note that, according to Haedo, while occupying less than a twelfth of the houses (a total of 12,200 "small and large"),⁷ the Andalusians made up a fifth or a sixth of the Moorish population of Algiers.⁸ There is little else on Andalusian emigration to the city. For instance, again according to Haedo, in 1517 a military expedition leaving Algiers under the command of 'Arūj counted 500 Andalusian Moriscos among its ranks.⁹ Nevertheless, the text does not tell us whether these included members of the families that had settled in Algiers. We must remember that the careers of 'Arūj and his brother Khayr al-dīn in the western Mediterranean included transportation to the North African coast of those Spanish Muslims who desired to leave the country. According to De Grammont (who cites as his source certain "oriental writers" without giving their names), "they carried more than 10,000 Moors across the sea."¹⁰ In the *Ghazawāt 'Arūj wa Khayr al-dīn*, which is probably De Grammont's source, there are several episodes of this kind. Khayr al-dīn crossed the Spanish waters for three months "in order to help his brothers and take on board those whom he could wrest from

⁷ D. de Haedo, "Topographie . . .," cit., 431. The number of houses proposed by Haedo is based on a seemingly easy calculation, which is nevertheless erroneous once the data in the text have been scrutinized. The calculation is further complicated by the fact that for some groups, for example the 'Azuagos' (*azudawa-s*), the reference is to "families" and not "houses"; for unmarried men he speaks of "barracks" not houses; he often speaks of families who live in huts or in "rented rooms," and at least in one case he refers to precarious habitations made of straw leaning against the houses outside the city. If we add up the habitations that the author explicitly attributes to each of the categories of the urban population (4,100 for the Moors, 7,600 for the Turks, 150 for the Jews) we reach a figure of 11,850. Perusing Haedo's text, the population is determined by a sum that includes the occupants of 11,850 houses, 100 families and 200 or 300 (sometimes more) unmarried men, to which may be added "c. 25,000 Christian slaves" and a small number of free Christians.

⁸ Among the four distinct groups comprising the Moors, Haedo considers that "those who were born in the city," the *Baldīs*, occupy c. 2,500 houses, the *Azuagos* reach 100 families and 200 or 300 unmarried men, the other Kabyles occupy c. 600 houses, while the *Alarbes* do not own houses in the city, since they live "in the porticos of houses" or else in straw huts outside Bāb 'Azūn (ivi, pp. 491-494). N. Saidouni

the Christian tyranny,"¹¹ though how many is not specified. Some years later his vessels sailed along the Spanish coasts in order to take on board Muslims who desired to move to Africa, and on this occasion "he embarked a large number who came to live in Algiers."¹²

Even later, between 1529 and 1535, the Algerian fleet made several crossings and "carried 70,000 souls to Algiers." This last figure is improbably large, since only a relatively small number of Spanish Moriscos set up residence in Algiers, which was not one of the cities where the majority settled. Most of those who landed in the central Maghreb went to live inland, or else in other cities along the coast, such as Sharshāll, which the *Ghazawāt* tells us underwent a kind of renaissance thanks to the Andalusian Moors.¹³

Apart from this rather vague information, other categories of immigrants populated the city and it doesn't seem as though the Andalusian community was the most important in terms of its demographic increase in the sixteenth century. Actually, Haedo states that when he arrived in Algiers the Turks were those who made up the largest nucleus of the population. We should recall that by "Turks" Haedo meant all those "who were born or whose fathers were born in Turkey," but also all those "who can call themselves Turkish by profession": in other words, those recently converted to Islam, Christians (often former slaves) who had renounced their faith. They made up the majority of the population ("they, together with their children, are more numerous than the other inhabitants, Moors, Turks, Jews, since there is not a single Christian nation that has not provided Algiers with its contingent of

¹¹ Translation by J. M. Venture de Paradis, edited by S. Rang and F. Denis, *Fondation de la Régence d'Alger. Histoire des Barberousse* (Paris, 1837), 37. Venture de Paradis' translation was based on an eighteenth century Arabic manuscript; it has been considered "a very poor French translation of an 18th century Arabic version, which is actually just a summary and is not always faithful to the original" (Gallotta, *op. cit. infra*, 3); an Italian translation of a Spanish manuscript held in the Biblioteca Comunale in Palermo, which is in turn a translation of a copy of the *Ghazawāt* held in the Escorial in Madrid, was published by E. Pelaez at the end of the nineteenth century, in "Archivio Storico

apostates"). Haedo gives them 6,000 houses, that is, a little less than half the population of the city.¹⁴

As for those "born in Turkey," the first nucleus was made up not only of the troops commanded by 'Arūj and Khayr al-dīn but also of 2,000 janissaries whom Sultan Selim II had sent to Algiers after his act of allegiance, and by Turkish volunteers who had arrived at the same time: altogether around 4,000 persons, as far as we can glean from the sources.¹⁵ Adding up the various categories, the Turks, with 7,600 houses in all, constituted the most important part of the population. To complete the picture of "ethnic" groups listed by Haedo were the Jews, with 150 houses in two different neighbourhoods.

Leaving aside for the moment any reflections on the absolute value of Haedo's figures and confining ourselves to their relative value, the contribution of populations from other countries seems to peak around the end of the sixteenth century. If we consider that, before the Turks seized power, the urban population was probably comprised mainly of Haedo's category of "Baldis"—to which we can add the "Azuagos" and other "Kabyles" together with the Jews and a certain number of Andalusians—then we can deduce that during the sixteenth century the population of Algiers tripled with the arrival of immigrants, favoured by the new position of the city within the context of events in the Mediterranean in this period. If we add the Christian slaves, then the population of Algiers was perhaps quadrupled. Such an increase—three or four times the initial population over a period of about 100 years—seems to be a unique phenomenon for a city of "*ancien régime*." From an economic perspective it corresponds to "the prodigious growth of Algiers" thanks to the privateering described by Fernand Braudel.¹⁶

¹⁴ Haedo, *Topographia*...cit., 497. This figure is probably exaggerated: the presence of a large number of "apostates" must have particularly impressed a religious man like Haedo. On the presence of converts to Islam in the militia in a later period, see T. Shuval, *op. cit.*, 60–62.

Sources and Data on the Population

This enormous increase in its population would be acceptable, if we could ascribe a reduced size and a modest position to Algiers with respect to other central North African cities in the period prior to Ottoman rule. Yet what exactly do we know about the population of Algiers in this period? Very little indeed. In the twelfth century, al-Idrîsî describes it as a "very populous" city with a flourishing trade, though this tells us little about its true demographic size.¹⁷ The first numerical calculation in the sources dates to the beginning of the sixteenth century, when Hasan al-Zayyati (aka Leo Africanus) gave it 4,000 hearths.¹⁸ This figure, the accuracy of which we have no comparative means of judging,¹⁹ certainly does not place Algiers amongst the most densely populated cities of the central Maghreb.²⁰ Its reduced demographic size in the first decades of Ottoman rule seems to be confirmed by Nicolas de Nicolay who was the first European to describe it in the sixteenth century.²¹ Passing through Algiers in 1551, he gives it a population of 3,000 hearths, even fewer than Leo Africanus.

This is just a brief outline of the scanty information available to us for the pre-Ottoman period. If we concede a substantial increase in the number of inhabitants due to immigration (tripling or quadrupling in about 100 years), we are immediately faced with the problem of

from 1560 to 1570, and of a "seconde et toujours prodigieuse fortune d'Alger" from 1580 to 1620 (*ibid.*, 203–205).

¹⁷ R. Dozy and M. De Goeje, ed. and trans., *Description de l'Afrique et de l'Espagne par Edrisi* (anastatic reprint of the 1866 edition; Leiden, 1968), 65. Other Muslim geographers in other periods, such as al-Bakrî and Piri Re'is, use the same locution in their descriptions of Algiers.

¹⁸ Leo Africanus, *op. cit.*, *ibidem*.

¹⁹ Without trying to find "des solutions au problème irritant que pose l'interprétation de la notion de 'feu'" (A. Raymond, "Signes urbains...", *cit.*, 192), we shall follow the currently accepted hypothesis that a "hearth" corresponds to a minimum of 4–5 persons. The problem remains, however, of the equivalence between "hearth" and housing unit, since living conditions were subject to variations, depending on the period and social class of the population. Far be it from me, however, to give "3(?) individus par famille"

physical space. Did the enlargement of the defensive walls in the early Ottoman period triple or quadruple the surface area of the city *intra muros*? Certainly not, even though, as mentioned above, it is difficult to evaluate the extension of the city prior to this period.

If we accept Pasquali's conclusions²²—whose analysis of the expansion of Algiers in the Berber and Ottoman period is based on an overly long list of hypotheses concerning the morphology of the site and on comparison with a medley of other urban sites—then the new space acquired by the city with the expansion of its walls would have been no more than about ten hectares. Another possibility is that the buildings in the pre-Ottoman city were concentrated within a limited area, with much of the space either uninhabited or used for the cultivation of crops.²³ A further hypothesis is that the pre-Ottoman city walls delimited a smaller perimeter than the one proposed by Pasquali and that they only enclosed the actual built environment—no more than twenty hectares at the most—in the low-lying area of the site, nearest the sea. This last hypothesis seems plausible,²⁴ even though we would need to interpret afresh the archaeological data and carry out new land surveys in order to prove it. All of which seems unlikely in the near future.

Whichever of these hypotheses is correct, the result of this demographic increase was the progressive occupation of all the space within the new city walls²⁵ and the gradual congestion of the built environment. This increase in the density of the buildings reached an extreme limit that shocked most Europeans who described the city in the sixteenth

²² E. Pasquali, "L'évolution de la rue musulmane d'El-Djezaïr," *Documents Algériens*, Série culturelle, no. 75 (1955). In the absence of more convincing material proof, Pasquali's hypothesis of the city's extension in the Berber period seems very doubtful (see also E. Pasquali, "Alger aux époques phénicienne et romaine," *Documents Algériens*, Série culturelle, no. 62 (1952); M. Leglay, "À la recherche d'Icosium," *Antiquités Africaines*, no. 2 [1978]).

²³ This seems to be the hypothesis accepted by, amongst others, S. Missoum, "El desarrollo de la medina de Argel entre los siglos XVI y XVII y sus relaciones con los textos y prácticas jurídicas," in *L'urbanisme dans l'Occident musulman au Moyen âge: Aspects juridiques*, (actes recueillis et préparés par) Cressier, Fierro, and Van Staëvel (Madrid, 2000), 220, fig. 3.

and seventeenth centuries. Returning once again to Haedo, it nevertheless seems unlikely that the available space within the walls could have allowed for the construction of over 12,000 houses (in the sense of separate individual units) and so we may conclude that this figure is exaggerated.²⁶

Arab and Turkish documentary sources from the seventeenth and eighteenth centuries contribute little to our knowledge of the demographic size of Algiers, while European sources provide quite a lot of data, though this is mostly information which does not come from a direct knowledge of the city, but from compilations, or which does not correspond to the physical size of the city. Throughout most of the seventeenth century many European writers state that the number of houses in Algiers was even greater than Haedo's estimation: from c. 13,500 according to Jean-Baptiste Gramaye, who was a prisoner in Algiers in 1619, to 15,000 according to the Venetian Giovanni Battista Salvago and to François Pierre Dan who both sojourned there a few years later. These last figures were taken up by many geographers and writers who dealt with events in Algiers and North Africa in the Ottoman period.²⁷ Starting with the figure of 12,200 inhabitants provided by Haedo, Jean-Baptiste Gramaye estimates that in the last quarter of the sixteenth and the first two decades of the seventeenth century the number of houses in the city increased by 1,300. These would have

²⁶ It is important to stress the fact that Haedo does not consider Algiers a large city, since it "only has 12,200 houses, both large and small" ("Topographia..." cit., in *RA* 14 (1870): 431). A more acceptable point of comparison could be that of 6,800 houses in the French military census after the Conquest (see *infra*). Nevertheless, we do not know with any accuracy the evolution of housing typologies in the two and a half centuries circa that separate the two estimates. In his above-mentioned article S. Missoum states that the lack of space generated—towards the end of the seventeenth century—a new typology of dwellings, the "*oluei*, casas de pequeñas dimensiones, sin *seast* *ad-dâr* o patio, que se desarrollan en altura" (op. cit., 225; on this type of dwelling, described as *olie* o *oleah* by T. Shaw, who was in Algiers from 1720 to 1732—and who seems identify it with the *dawcira*, one of the types of lodging preferred by the janissaries according to Shuval—see also T. Shuval, op. cit., 97–98). Braudel speaks of the urban development of Algiers during the sixteenth century as that of a "ville

been mainly houses built inside the walls by the former inhabitants of the *extra moenia* suburbs that had been destroyed in 1573, while a further wave of Andalusians, expelled from Spain in 1609, supposedly found asylum in Algiers in 300 new houses ("casas vel domus" writes Gramaye in Latin; that is, both shanties and proper houses).

From the last decades of the sixteenth century the population recorded by most of the European sources seems to rocket: 130,000 inhabitants according to Lanfreducci and Bosio (1587); 150,000 according to Salvago (1625), who describes the city as being "full as an egg"; the same figure according to Tollot (1731); and c. 117,000 according to Shaw (1738). The figure of 100,000 is the one that recurs most frequently. At least twelve European authors mention it in their writings, though we must remember that others mention lower figures: Botero (1595), Davity (1625) and Coppin (1686) cite 80,000 inhabitants, Lithgow (1615) 30,000. Later, Cano (c. 1750) speaks of 50,000 inhabitants, as do Venture de Paradis (1789) and Shaler (1815). According to Raynal (1788), there were fewer than 50,000, while, according to Dubois-Thainville (1809), there were between 75,000 and 80,000.

The discrepancies between the European authors' estimations correspond to the real difficulty of proposing figures that are not merely the result of subjective appraisals or that take up uncritically more reliable reports. It would seem that a first-hand knowledge of North African cities and the related literature which could provide better tools for evaluation does not generate greater objectivity. Gråberg, for example, who was Swedish consul in North African countries and who bases his observations on consolidated bibliographical research, gives the city a minimum of 70,000 inhabitants and c. 10,000 houses: as a point of comparison, we should recall that the first French military census, after taking the city, gives 24,200 inhabitants and c. 6,800 houses.²⁵

²⁵ *Mémoire Collas*, 2. Lespès (op. cit., 140) cites the figure in this text from a copy held in the same archives ("art I, n. 11"), which is probably different from our copy (see note 3 above). We have not found the document cited by Lespès, who does not give figures for the population (see R. Lespès, op. cit., 140). The census to which

The data from the available sources, almost all of which have been published,²⁹ highlight both the above-mentioned discrepancies and the widespread acceptance on the part of European writers of 100,000 or more inhabitants, especially up to the beginning of the eighteenth century.

Table I. The population of Algiers in the ottoman period according to the sources.

1516	Hasan al-Zayyâti/ Leo Africanus	4,000 hearths
1550	Nicolay	3,000 hearths
1578-1581	Haedo	12,200 houses
1587	Lanfreducci and Bosio	130,000 inhabitants
1588	Sanuto	4,000 hearths
1595	Botero	80,000 inhabitants
1605	Savary de Brèves	100,000 inhabitants
1615	Lithgow	30,000 inhabitants
1619	Gramaye	c. 13,500 houses
1621-1626	Mascarenhas	12,000 houses
1625	Salvago	150,000 inhabitants, 15,000 houses
1634	Dan	more than 100,000 inhabitants, c. 15,000 houses
1640-1642	Aranda	100,000 inhabitants
1656	Sanson d'Abbeville	12,000/15,000 houses
1660	Davity (ed. De Rocoles)	c. 13,000 houses
1662	Auvry	100,000 inhabitants, 13/15,000 houses
1665	Du Val	15,000 houses
1668	Dapper	c. 15,000 houses
1670	Ogilby	100,000 inhabitants, 15,000 houses
1674-1675	Arvieux	more than 100,000 inhabitants, 15,000 houses
1683	Manesson-Mallet	100,000 inhabitants
1685	Laugier de Tassy (ed. 1725)	100,000 inhabitants
1686	Coppin	c. 80,000 inhabitants
1688	De La Croix	15,000 houses
1700	Comelin	more than 100,000 inhabitants

Table I (*cont.*)

1719	Gueudeville	100,000 inhabitants
1729	Vander Aa	c. 5,000 houses
1731	Tollot	150,000 inhabitants
1738	Shaw	c. 117,000 inhabitants
1750 c.	Juan Cano	50,000 inhabitants
1784	Palermo	more than 100,000 inhabitants, no fewer than 15,000 houses
1785–1788	Von Reh binder	80,000 inhabitants
1788	Raynal	fewer than 50,000 inhabitants
1789	Venture de Paradis	c. 50,000 inhabitants, 5000 houses
1808	Boutin	73,000 inhabitants
1809	Dubois-Thainville	75,000/80,000 inhabitants
1815	Shaler	c. 50,000 inhabitants, c. 5,000 houses
1815–1817	Pananti	100,000 inhabitants
1830	Gräberg	70,000 inhabitants, c. 10,000 houses
[1830	Mémoire Collas	24,200 inhabitants, 6,800 houses]

Data from the European Sources: A Comparative Critical Approach

The European sources disclose a quite stable population throughout the seventeenth century; indeed all the authors except two give the city 100,000 inhabitants. Yet can we really imagine a population of 100,000 or more for a city the size of Algiers in the Ottoman period? This figure has been generally accepted by modern historians and geographers. In an analysis published in 1929 on the distribution of the population in the Kasbah, which in the colonial period corresponded roughly to the perimeter of the Ottoman city, René Lespès does not express surprise, considering the recorded density, “that 17th century authors could, without exaggeration, give an estimate of 100,000 or more inhabitants for Algiers.”³⁰ More recently this figure has been questioned by André Raymond. In one of his studies on Arab cities in the Ottoman period we read:

Much more modest [at the end of the eighteenth century] was a city like

lower than its population in the seventeenth century. The doubt arises especially for Algiers: the density [of its population] is extremely high, with 646 inhabitants per hectare (per 30,000 inhabitants in 1830), even more than the Qâhira district in Cairo. This may be explained by the "compression" of the city within its walls, the density of the buildings, their vertical structure, and finally the presence of prisons, in which the slaves were locked up at night and barracks crammed with thousands of janissaries and Christian slaves. Yet it is obvious that the estimated figures for earlier periods (one speaks commonly of 100,000 inhabitants in the seventeenth century) merit the soundest scepticism. A density of 2,000 inhabitants per hectare is only a recent phenomenon, in cities like Algiers and Cairo, for reasons linked to colonization or to the demographic explosion in the twentieth century.³¹

Raymond's comparative approach shows that, even with the lower estimate of 30,000 inhabitants, Algiers would have had a higher density than any other large city in the Arab world at the end of the eighteenth century, with 650 inhabitants per hectare.³² Moreover, Raymond suggests that the figure of 50,000 proposed by Venture de Paradis at the end of the eighteenth century is closer to the truth.³³

Venture de Paradis' account (who was in Algiers from 1788 to 1790) seems carefully thought out. Besides, with the French Consulate as an observation point, he would have had a clearer idea of the urban reality of Algiers, while with respect to other European writers he had the advantage of knowing Arabic and Turkish. He writes:

Algiers has the extension that a city of 25,000–30,000 inhabitants in France would have and I think that its actual population could be realistically estimated at 50,000 souls, taking into account the number of women who are always at home and so are never part of the crowd. Of these 50,000 we can count 6,000 Gouloglis, 3,000 eastern Turks, 7,000 Jews, 2,000 slaves and other Christians and 32,000 Moors, amongst whom we include those who come from Biskra and have the same function here that people from Savoy and Auvergne have in Paris, the Zawâwa, those who come from M'zab and Jerba, etc.³⁴

³¹ A. Raymond, *Grandes villes arabes à l'époque ottomane* (Paris, 1985), 62–63.

We may note in passing that in the second half of the eighteenth century, while Venture de Paradis was writing his *Notes*, almost all the other European sources abandon the estimates of 100,000 or more inhabitants and propose lower figures, from 80,000 to even fewer than 50,000. Taking into account these figures, Venture de Paradis' estimates still seem plausible, though we need to make a few observations before accepting them.

The second half of the eighteenth century was certainly not the most prosperous time for the capital of the Ottoman Regency and, "to the extent that the parallel between the growth or decline of a population and economic progress or decline can be accepted as a valid hypothesis for research,"³⁵ we may assume a larger number of inhabitants during its period of greater prosperity. It is tempting to locate this period in the second quarter of the seventeenth century—a few years more than the period proposed by Braudel³⁶—though no documentation gives us an exact evaluation of the population then. The figure of 100,000 inhabitants (or more) proposed by European authors who visited Algiers in this period (more than 100,000 according to Dan in 1634; 100,000 according to De Aranda in 1640–1642) is not really acceptable, not only in relation to the size of the city, but also because it clearly corresponds to the writers' desire to strike the reader with an exceptional image of the situation.³⁷

years 1895–1897], 3. In another passage we encounter an interesting comment, which is nevertheless difficult to translate in numerical terms: "On pourrait peut-être juger de la population d'Alger par les moulins à farine qu'il y a dans la ville, moulins à meules tournées par des mules ou des chameaux; il y en a vingt-cinq tenus par les *Mozabiz*, qui font au plus trente mesures chacun par jour" (*ibid.*).

³⁵ A. Raymond, "Signes urbains..." cit., 183.

³⁶ The effects of the "seconde prodigieuse fortune d'Alger" of which Braudel speaks [he dates the city's apogee between 1580 and 1620, *op. cit.*, vol. 2: 195] were still being felt. The mid seventeenth century corresponds, moreover, to the end of that

A Gradual Demographic Decline

The inversion that appears in the vicissitudes of the city and its economic resources can be located towards the end of the third decade of the sixteenth century, even though from a demographic point of view this did not translate into an immediate decline. The year 1638 and the Battle of Valona seem acceptable as the symbolic moment of this inversion. Nevertheless, the consequences of this battle in which Turks and Venetians faced one another were not merely symbolic for Algiers: the city lost an important part of its ships and their crews, together with many Christian galley slaves.³⁸ The cost of rebuilding the fleet (which a few years later, in 1644, would again suffer heavy losses during the siege of Canea) forms a pair with the "technological" changes of the navigation: the galley system was gradually but definitively abandoned after Valona: "The maintenance of groups of slaves in the prisons no longer made any sense economically and [so] it was easy to pass from the concept of 'slave-energy' to that of 'slave merchandise'":³⁹ together with the need to swell the Regency coffers, this meant that the liberation of slaves increased during the following decades, leading to a clear preponderance of "outgoing" with respect to "incoming" slaves, in other words, a progressive decline in their number.

During these same years, especially in 1639, earthquakes, famine and other tragic events befell the population of the city. From 1650 the demographic crisis that struck the population after a series of devastating epidemics becomes apparent.⁴⁰ Yet the crisis was also a political one:

³⁸ See H. D. De Grammont, "Histoire..." cit., 187-188. According to De Grammont the losses were 16 galleys and 2 brigantines (almost half the galleys and a fourth of the Algerian naval fleet? See M. Belhamissi, *Marine et marins d'Alger 1518-1830* [Algiers, 1996], 1: 94), 1,500 dead and 3,634 slaves set free (according to S. Bono, *I corsari barbareschi* [Turin, 1964], 43-44, the losses were quickly recovered). See also P. Boyer, "Alger en 1645 d'après les notes du R. P. Hérault," in *Revue de l'Occident musulman et de la Méditerranée* [henceforth: *ROMM*], 17 (1974): 19-26, who considers this episode within the framework of a more general crisis.

³⁹ P. Boyer, *op. cit.*, 25.

⁴⁰ Epidemics were quite frequent in Algiers, occurring throughout the century (see

until 1671 and the beginning of the Dey period, but also afterwards, there was a series of institutional upheavals. The military power of the city and its very safety were threatened, especially during the attacks and bombardments of the French fleet in the 1680s.⁴¹ Greater political stability set in from the second decade of the next century and continued, more or less, until the end of the eighteenth century. Throughout the Regency the peace and economic revival that characterised the long period of the Dey government under Muhammad bin 'Uthmān (1766–1791) has lead André Raymond to state that this period "can be considered as a period of Algerian renaissance."⁴² The revival of privateering (with the consequent economic recovery) and the peace treaties with a part of the Christian potentates led to a renewed wealth for Algiers. Nevertheless, while on the one hand the city saw an increase in its number of slaves, on the other it underwent naval attacks and was struck by periods of famine and a series of epidemics which closed the last years of Muhammad bin 'Uthmān's government.

Summing up the main features of the evolution of Algiers in the seventeenth century and the first three-quarters of the eighteenth: the arrival of immigrants during the expulsion of the Moriscos from Spain

the number of deaths seem exaggerated. The priest Gianola, chaplain to the Christian slaves at the time, states that during the 10 months of the pestilence in 1690 and 1691, 40,000 Turks and Moors and 1,000 slaves died (Archivio della Sacra Congregazione per l'Evangelizzazione dei Popoli, ex De Propaganda Fide [henceforth: APF], SC-Barbaria, vol. 3, f. 29; G. Gianola's letter from Algiers, 29.04.1691. For references to the documents in APF quoted below, especially in Tables 3 and 4, see F. Cresti, *Documenti sul Maghrib dal XVII al XIX secolo* [Perugia, 1988], *passim*). De Grammont states, without comment and without citing his sources, that the epidemic that broke out in 1698 killed between 25,000 and 40,000 people a year for four years (H.-D. De Grammont, "Histoire..." cit., 268–269). These figures are unacceptable, unless De Grammont is implicitly referring to the whole territory under the Regency.

⁴¹ The bombardments in 1682, 1683, and 1688, which greatly damaged the buildings, don't seem to have taken many lives, since the population fled to the countryside (*ibid.*, 256; see also F. Cresti, *Algeri nel XVII secolo...* cit., Part 2, 1635–1700, SM 17 [1985]: 45–52). From a demographic perspective none of the bombardments of Algiers had serious consequences, even though the documents give varying figures for the loss of lives. For example, in the most terrible in the city's history, those of the English fleet

after 1609, together with an increase in the population generated by economic prosperity and the influx of slaves, swelled the population to its greatest number between 1625 and 1638. The space within the city became saturated, with a dense built environment inside the city walls made up of two and three, or even more, storey buildings.⁴³ The forms of precarious habitat of the most recent immigrants may have disappeared in this period. The end of the period of great wealth and a political crisis, together with natural calamities, led to an initial demographic decline, of uncertain proportions, towards the half of the seventeenth century. A gradual decline, with moments of acute crisis (during natural calamities such as earthquakes and epidemics), took place over the course of a century, with a hypothetical moment of revival from the mid-seventeenth century to 1797. At the end of this period the population count may be estimated at c. 50,000.

The documentary evidence concerning the effects of the earthquakes that struck the city in the seventeenth and eighteenth centuries is somewhat imprecise, since the known sources generally confine themselves to describing the material damage. For instance, there is a curious account of the effects of an earthquake on the height of the buildings in the report of an eighteenth century mission for the liberation of Christian slaves, in which we read that the French consul's house was "one of the most beautiful in Algiers: before the last quake [3 February 1716] it was three storeys high, while today it is only two."⁴⁴ We learn from the same source that this earthquake, which was followed by more tremors until June of the same year, badly damaged all the buildings in the city and that seven years later, despite repairs, many houses were still "destroyed or half-collapsed. [The quake] was so violent that most of the houses in the countryside were reduced to rubble and the whole city would have suffered the same fate had the houses not been so close together that they supported one another."⁴⁵

The documents concerning the epidemics are not generally unanimous in their assessments. There was, however, a notable demographic

crisis towards the end of the eighteenth century about which we have more precise information thanks to the sources and archival records: the plague of 1787–1788. While we have only vague estimates of the effects of earlier epidemics, in this case the sources give us a more precise vision of the loss of human life, and all the figures they give are very high. According to the writer Ahmad al-Sharīf al-Zahār who dedicated a few lines of his *Chronicles* (written a few decades later) to this event, up to 500 people a day died during the epidemic.⁴⁶ According to Raynal who was in Algiers during this period, amongst the dead counted at the city gates were 14,334 Muslims, 1,774 Jews and 613 free Christians and slaves.⁴⁷ The total of 16,721 dead is confirmed in a letter from the consul De Kersey who calculated, moreover, between 5,000 and 6,000 dead in the nearby countryside, while Von Rehbinder, who was in Algiers between 1785 and 1788, speaks of 15,829 victims in five months.⁴⁸ Finally, here is Venture de Paradis' account:

1787 was a mournful year for Algiers, the plague carried out a terrible massacre. Every day for four whole months 200, even 240, Muslims died, without counting Christians and Jews. In 1788 the pestilence struck again, though it was not so cruel. In two years almost 700 Christian slaves died. The plague of 1787 must have killed a third of the inhabitants.⁴⁹

If we accept Venture de Paradis' estimation, together with that of the other eyewitnesses, the population of Algiers would have been slightly over 50,000 inhabitants before the plague, and c. 35,000 afterwards.

In the next forty years, from this event to the capture of Algiers by the French, the population would remain more or less constant. The absence of natural disasters and serious epidemics and a certain eco-

⁴⁶ Cit. in M. Belhamissi, "Une lettre inédite sur Alger au XVIII^e siècle," *Archives Nationales (Algiers)*, no. 6 (1977): 41.

⁴⁷ G. T. Raynal, *Histoire philosophique et politique des établissements et du commerce des Européens dans l'Afrique septentrionale*, 2 vols. (Paris, 1826), 2: 112, cit. in R. Lespès, *op. cit.*, 139.

⁴⁸ The passage in De Kersey is quoted by M. Belhamissi, *Une lettre ... cit.*, 40. The

conomic stability³⁰ allow us to discard the hypothesis of a marked period of demographic, indeed general, decline that is commonly accepted by colonial historiography. Yet we still need to use caution when affirming that the population remained constant between the end of the great epidemics and 1830, since the sum total of the population in Algiers before the French conquest is in any case the object of conflicting evaluations and hypotheses.

The most reliable, and the first "modern," piece of information concerning the population is the first census of 1830 in the above-cited document in the Vincennes military archives, the *Mémoire Collas*:

The census ordered by the General in command gives these results:

- 1) Moors, a cross between ancient Mauritians, who remained in the country after the various invasions, Spanish émigrés and Turks, for a total of 16,800
- 2) Jews expelled from Europe in the thirteenth century, c. 5,200
- 3) Negroes, freed slaves, or domestic servants of both sexes, 1,200
- 4) Indigenous Kabyle and Arab workers, together with Negroes, for a total of (their number is not known), c. 1,000.³¹

Thus, a total of 24,200 people, which nevertheless does not constitute the whole of the urban population at the end of the Ottoman period. Actually, both before and after the entry of the French troops on 5 July 1830, a part of the population which is difficult to estimate fled the city.³² Moreover, members of the janissary militia (2,500 single and 1,000 married men according to the documents)³³ and their families

³⁰ The presence of slaves (see *infra*), which was fairly constant until 1816, indeed showing a notable increase between 1800 and 1815, could constitute an interesting gauge.

³¹ *Mémoire Collas*, 3. In the manuscript the number of "Negroes" ("Environ 1,000") seems to have been added after and the total is not given. P. Rozet's observations (*op. cit.*; *passim*) on the "premier dénombrement, effectué au lendemain de notre arrivée," which are taken up by Lespès (*op. cit.*, 497), are misleading. After a long series of calculations and observations, Rozet gives the city 30,000 inhabitants before the French Occupation.

³² See H. Khodja, *Le Miroir* (Paris, 1985), who recounts the departure by boat of many families "pour se sauver dans les pays des Kabyles et à Bougie" before the Occu-

were expelled along with other Turks on the orders of the expedition commander Bourmont.²⁴ About 1,000 families and 2,500 single men, and so certainly more than 5,000, indeed probably at least 7,000 people altogether.

If we add all those who fled the city and those who died during the military operations from the landing of French troops at Sidi Ferruch to the armistice, we can state with a fair degree of certainty that on the eve of the colonial conquest the population of Algiers counted well over 30,000 inhabitants. Two further documents seem to confirm this: the first (probably written by someone close to Bertrand Clauzel, the chief commander of the army, who had ordered the first census) states that the population "before the French invasion had risen to 40,000 souls,"²⁵ while the report of the commission of inquiry sent to Algiers three years after the conquest states that "Algiers counted 35 to 40 thousand souls before the siege."²⁶

The Number of Slaves

In the demographic context of an *ancien régime* city in which, as we can assume, birth and mortality maintain the population at a more or less constant level, immigration becomes a decisive factor in any marked variation in the number of inhabitants. We have already examined and discussed the impact of Turkish and Andalusian immigration, as well as that of converts to Islam, on the sudden rise in the population during the early Ottoman period. It is more difficult, however, given the present state of our knowledge, to evaluate another decisive factor in the population of Algiers during its most controversial period: that

[Paris, 1929], 182–189. In view of their expulsion 965 married Turks registered with the police at the end of July; on 30 July "cinq cents et quelques Turcs paraissent avoir été embarqués, ainsi qu'un grand nombre de femmes et d'enfants". Other authors speak of the expulsion of 4,000 janissaries (see R. Leipès, *op. cit.*, 497).

²⁴ See *Mémoire Collot*, p. 3: "depuis l'expulsion des Turcs par les Français, et

of the slaves, in the city's most auspicious days, from the end of the sixteenth to the mid seventeenth century.

This problem no longer presents itself for the later period, from 1736 to the French conquest, since in the last century of Ottoman rule the Arab-Turkish documentary sources give very precise indications. Below is a table of the figures found in the *Defter-i teshrifât*,⁵⁷ one of the Ottoman administrative registers studied by Albert Devoulx, keeper of the state archives in Arabic during the first decades of the colonial period.

For the period from 1787 to 1830, during which time we suggested that the population was fairly stable—between 30,000 and 40,000 inhabitants—the *Tachrifat* allows us to calculate the number of slaves on a total variable number as between a minimum of 1.5% and a maximum of 4.7%; thus an average of c. 3% of the population. Using the figures from the *Tachrifat*, this average would also be confirmed for a population of c. 50,000 inhabitants in 1780. The sharp drop registered in the number of slaves between 1786 and 1787 (a reduction of c. 60%, with the loss of 854 lives in one year, a number close to the c. 700 given by Venture de Paradis) was due to the epidemic that ravaged the city in those years (see above).

From 1816 the impact of the number of slaves on the total population was greatly reduced. Following Lord Exmouth's expedition, when he informed the Governor of Algiers of the abolition of slavery decreed by the Congress of Vienna and freed all Christian slaves, the number dropped to 0.5% of the urban population, with a residual presence of c. 150 slaves in 1830.

⁵⁷ A. de Voulx, *Tachrifat. Recueil de notes historiques sur l'administration de l'ancienne régence d'Alger*, Imprimerie du Gouvernement (Algiers, 1852) [henceforth: *Tachrifat*]. The documents translated into French (some of the Turkish documents were initially translated in Arabic) in this collection merit a scrupulous verification and a critical revision based

Table II. Christian slaves in Algiers 1736-1816 (source: *Tachrifat*, p. 86).³⁸

1736	1,063	1757	1,561	1778	1,369		
1737	931	1758	1,571	1779	1,481	1798	1,168
1738	705	1759	1,753	1780	1,494	1799	1,019
1739	569	1760	1,941	1781	1,586	1800	860
1740	412	1761	1,993	1782	1,532	1801	545
1741	499	1762	1,902	1783	1,507	1802	772
1742	530	1763	1,900	1784	1,520	1803	946
1743	582	1764	1,920	1785	1,372	1804	901
1744	739	1765	*1,904/1,944	1786	1,426	1805	1,022
1745	741	1766	2,004	1787	572	1806	1,228
1746	783	1767	2,062	1788	574	1807	1,267
1747	821	1768	1,131	1789	659	1808	1,422
1748	1,003	1769	1,226	1790	715	1809	1,545
1749	950	1770	1,323	1791	762	1810	1,357
1750	1,063	1771	1,320	1792	832	1811	1,345
1751	1,773	1772	1,190	1793	755	1812	1,475
1752	609	1773	1,326	1794	*779	1813	1,656
1753	632	1774	1,376	1794	*896	1814	1,523
1754	591	1775	1,373	1795	730	1815	1,450
1755	564	1776	1,468	1796	659	1816	1,016
1756	694	1777	1,501	1797	546		

* The dates are those of the Christian era: in two instances the double figure is probably due to the discrepancy between the Gregorian and Islamic calendars.

³⁸ For the same period we possess data provided by European authors and sources given in the table below.

Table III. Christian slaves in Algiers according to European sources (1738-1830).

1738	T. Shaw	c. 2,000
1785	Von Rehbinder	2,000
1786-1787	Venture de Paradis	2,000
1788	Raynal	800
1788	Von Rehbinder	800
1788-1789	Venture de Paradis	500
1796	Alasia (APF)	700
1801	Vicherat (APF)	500
1805	Joussouy (APF)	1,200

What can we say about the period prior to 1736? As far as the Arab and Turkish sources are concerned, only the *Ghazawāt* gives us figures, which it is nevertheless difficult to verify. An initial figure testifies to the presence of 7,000 slaves in Algiers (there was a slave revolt around 1532 which Khayr al-dīn put down).⁵⁹ Other passages state that this first substantial nucleus of slaves was not comprised of Christians captured by corsairs, but was the result of Spanish attacks against the city. The *Ghazawāt* cites in particular 3,036 Spaniards captured when the fleet commanded by Hugo de Moncada was sunk in 1519. A further expedition which arrived too late to help the Peñon's spanish garrison and was partially destroyed by Khayr al-dīn in 1529 provided the city with a total of 2,700 slaves.⁶⁰ Apart from this information, for the period prior to 1736 we only have the data supplied by European sources:

Table IV. Christian slaves in Algiers according to european sources (1578-1729).⁶¹

1578-1581	Haedo	almost 25,000
1587	Lanfreducci and Bosio	20,000
1598	Magini	almost 15,000
1619	Gramaye	more than 35,000
1621-1626	Mascarenhas	more than 16,000
1625	Salvago	25,000
1634	Dan	25,000
1640	Aranda	30,000/40,000
1644	Hérault	30,000/40,000
1660	Davity (ed. De Rocoles)	35,000
1662	Auvry (Miroir de la Charité)	30,000/40,000 "dans toute la Régence" more than 12,000 "à l'intérieur de la ville"
1665	Du Val	more than 40,000
1674	Arvieux	10,000/12,000
1676	The Present State of Algiers	18,000 of which 9,000 French

Table IV (*cont.*)

1678	De Fercourt	20,000/30,000
1683	Manesson Mallet	35,000/40,000
1684	Pétis de la Croix	35,000 "dans le Royaume d'Alger"
1693	Lorance (APF)	4,000
1696	Lorance (APF)	1,600 "dans les Bagnes"
1698	Lorance (APF)	2,600
1700	Comelin	8,000/10,000
1701	Lorance (APF)	3,000
1719	Gueudeville (Atlas)	4,000
1729	Fau	9,000/10,000
1729	Vander Aa	more than 5,000

The highest figures (30,000, 35,000, 40,000) proposed by most of the sixteenth century authors, especially for the period from 1620 to 1680, do not seem acceptable, unless we were to admit that Algiers was nothing more than an enormous prison!⁶² Indeed, they presuppose a huge proportion of slaves with respect to the total population: 30% to 40%, if we accept the average of 100,000 proposed by the same authors, even more, if this average was lower when the city was at its most prosperous. A comparative analysis shows us that no other city in the Mediterranean in which the phenomenon of slavery was significant and for which we possess some relevant series of data reached similar levels. In Trapani (Sicily), a *ricelo* (census) of 1569 allows us to calculate that the slaves comprised 15% of the total population. According to some analyses, in Civitavecchia the slaves comprised 20% of the population in 1601, 10% in 1622 and 8% in 1642-43, while for Genoa the estimate is 3% at the end of the 16th century.⁶³ For Malta—"a kind of Christian equivalent of the privateering cities of North Africa"—the estimates vary, since the available data only refer to the total population: their results vary between 4.3% and 5% in 1590, with 3.5% as the highest figure in 1632 (9% of the population of La Valletta, where the

slaves were concentrated, since at that time the city had a population of 22,000).⁶⁴ Nevertheless, not even in this case does a comparative evaluation give us any certainty, even though it allows us to entertain some doubt over the validity of the figures proposed for Algiers.

Returning to the European sources in the table above, only the figures given by Yvon Lorance, apostolic vicar in Algiers from 1693 to 1705, though imprecise and merely indicative, seem plausible. The vicar was particularly active in helping Christian slaves and so he must have been able to estimate their number. Presumably the disparity in the numbers he gives over the years is due to his interest in this phenomenon in terms of quantity.⁶⁵ The data tell us, moreover, that towards the end of the seventeenth century the slaves living in the baths (the majority of whom probably belonged to the *beylik*) represented less than half the total number.

If Lorance's figures are close to the truth, then they are far from those of other European observers who speak of 20, 30, 40, even 50 thousand slaves for the years immediately preceding. No known event in the second half of the seventeenth century justifies such a sudden decrease in the number of slaves (from a minimum of 15,000 to more than 30,000 over a period of about 30 years). Most likely the number of slaves followed a diminishing curve due to their liberation in large numbers, the assaults against the city and the various epidemics, especially, if we consider that during the same period privateering continued uninterrupted.⁶⁶ Perhaps the figures given by D'Arvieux (10,000–12,000

⁶⁴ M. Fontenay, "Il mercato maltese degli schiavi al tempo dei Cavalieri di San Giovanni (1530–1798)," *Quaderni storici* 107 (2001): 394.

⁶⁵ The disparity in Lorance's figures (a total of 4,000 in 1693, 1,600 "dans les bagnes" in 1696, a total of 2,600 and 3,000 in 1698 and 1701 respectively) is not exceptional, though it is strange not to find any echo of the expedition against and capture of Tunis, which brought Algiers "une grande quantité d'esclaves" according to De Grammont (*Histoire...*, cit., 265). Nevertheless in a letter to Rome, Lorance describes the triumph of the Algerian troops on their return from Tunis, which they had taken after the defeat of the *bey's* army at the end of 1694 (APF, SC, Barbaria, vol. 3, f. 251; Lorance to PF, 2/3/1695). The "grande quantité" of slaves consisted only of 400 slaves once belonging to the *bey* Muhammad (T. Bachrouch, *Formation sociale*

slaves in 1674) and Auvry in his *Miroir de la charité* (more than 12,000 within the city in 1662) are closer to the truth.⁶⁷ Supposing that the greatest number of slaves corresponds more or less to the demographic and economic apogee of the city, between 1625 and 1638, or in any case in the first decades of the seventeenth century, we can hypothesise that the slaves were more numerous in this period (perhaps several thousand more, c. 15,000?).⁶⁸

A Numerically Important Minority: The Jews

Another category of the population for which we are in possession of data, especially from European sources, is the Jewish community, though the highest figures are not to be accepted without reservation, especially those given by Shaw (15,000), as well as the 5,000 houses inhabited by Jewish families given by Laugier de Tassy, both of which are highly unlikely. The only plausible reference is to be found in the census at the end of 1830, which records the presence of 5,200 Jews in Algiers. This figure should also correspond to their presence before the French Occupation, since the Jews did not leave the city after this event.

Table V. The Jewish community in Algiers according to European sources.

1533-1536	<i>Mémoire Simancas</i> (trans. De la Primaudaie)	300 families
1578-1581	Haedo	150 houses
1619	Gramaye	more than 8,000
1634	Dan	9,000-10,000
1660	Davity (ed. De Rocoles)	more than 8,000
1662	Auvry	8,000-9,000
1670	Ogilby	9,000-10,000
1674	D'Arvieux	10,000-12,000

be tempted to use De Grammont's ratio of 1:20 French slaves in relation to the total number ("Études algériennes. La course, l'esclavage et la rédemption à Alger," in *Revue Historique* 26, no. 1 [1885]: 37), though his estimate seems based on mere supposition. Finally, a letter from Algiers written by a missionary in 1691 speaks of the death of

Table V (cont.)

1676	<i>The Present State of Algiers</i>	13,000 "native Jews"
1725	Laugier de Tassy	5,000 houses or families
1738	Shaw	15,000
1742	Tollet	5,000 families
1754 (before)	Ricaud (in <i>Venture de Paradis</i>)	7,000-8,000
1784	Palermo	5,000 families
1789	<i>Venture de Paradis</i>	7,000
1808	Boutin	10,000-12,000
1826	Shaker	5,000
1830	<i>Mémoire Collas</i>	c. 5,200
1830	Rozet	5,000

The demographic evolution of this part of the population is known in its broader spectrum.⁴⁰ The Jewish community was formed, or in any case enlarged, at the end of the thirteenth century, thanks to immigration from the Balearic Islands. In the following century, but also after the edict of 1492 which only left them the choice of exile or conversion, many arrived from Spain. Before the establishment of Ottoman rule many had already come from Italy, the Netherlands, France and England. Khayr al-din facilitated their settlement in Algiers, after which they played an important part in the city's economy, especially thanks to the trade and commerce generated by privateering.

Algiers experienced a final immigration of Jews from Europe in the eighteenth century with the arrival of entire families from Leghorn who quickly assumed a prominent commercial and political role in the life of the city, especially once they obtained the monopoly on the exportation of cereals. This period of prosperity ended in 1805, the year in which their houses were sacked and they were massacred after the assassination of Nephtali Busnach, the richest and most powerful Jewish merchant in the city. Using French documents in his reconstruction of events, De Grammont informs us that at least 50 Jews were murdered on this occasion, while another 200 escaped unharmed by

very large number of survivors"⁷⁰ was immediately exiled by the *dey* Mustapha. It is impossible to define precisely the reduction in the Jewish population on this occasion, but if we rely once again on Venture de Paradis' account who calculates their number at 7,000 in 1789, and if we take for granted a certain degree of stability in the following years, then the reduction over the last two decades of the Ottoman period would be between 1,000 and 2,000 people.

A constant of the Ottoman period, cited by at least two authors with a 200 years interval, Gramaye and Venture de Paradis, is the density of the population in the Jewish neighbourhoods. The former claims to have counted at least 300 people in one house, while the latter writes that 7,000 Jews lived in only 180 houses, with an average, therefore, of a little under 40 inhabitants per house.⁷¹

The Military Presence: The Janissaries

The European sources also give quite variable figures for the janissaries. The 11,897 recorded in 1745 in the pay-roll registers,⁷² constitute a precise figure for the second half of the eighteenth century. The distinction between "men in the fighting services" (9,322) and "soldiers out of the ranks" (2,575), used in the analysis of these registers, is of little importance for our own, while their total number is considerable when compared to other known situations.⁷³ It is difficult to say whether the number of janissaries recorded in this period is lower than in earlier periods, though probably the highest number of troops was in the first half of the seventeenth century. The construction of two

⁷⁰ H.-D. De Grammont, *Histoire...* cit., 361. In a Judeo-Arab lament quoted by Bloch, the militia massacred 42 Jews in the synagogue and wounded many more. The author states that the expulsion was only a threat, but that 300 families left for Tunis and Leghorn in July of the same year (see M. Eisenbeth, *op. cit.*, 377).

⁷¹ L. B. Gramaye, *op. cit.*, 13; Venture de Paradis, *op. cit.*, 3.

⁷² J. Deny, *op. cit.*, 36. See also F. Cresti, "Quelques réflexions..." cit., 161.

⁷³ For example Cairo, where 6,461 janissaries were counted, out of a total of 15,916

military barracks in the Ottoman period, known by the Turkish names of *Odalar eski* and *Odalar yeni*, in 1627–28 and 1637 respectively, seems to confirm this hypothesis.⁷⁴

The natural mortality rate, together with the mortality rate of those who died in armed combat, could open up great voids in the military ranks. According to a 1754 account, for instance, the number of troops was reduced to 4,000 men.⁷⁵ The census carried out on the orders of *dey* Muhammad Khaznaji in 1815 constitutes a further, quite reliable, datum: it demonstrates that the reduction in the number of troops was not filled by new recruits and reveals the presence of 4,000 men of whom 700 were not in active service.⁷⁶ These figures seem to be confirmed by the number of janissaries expelled after the French Occupation. Taken as a whole, they seem to indicate a constant decline in the armed forces from the mid eighteenth century onwards: the 8,533 new recruits between 1801 and 1829⁷⁷ (with an average of c. 300 per annum) were not sufficient to renew the military might of the city's most glorious days.

We might speculate that the decline in the number of janissaries was compensated for by the recruitment of local militia men, though the available sources are inaccurate and the data they provide disparate and hence unreliable. Gråberg, for instance, states that the Regency could, if needed, call on the services of at least 100,000 soldiers, and estimates that on the eve of the French expedition the city garrisons counted 4,000 to 5,000 Turks and 10,000 "Coloulis" and Moriscos. The author also mentions the presence of 2,000 cavalymen and a new battalion of "natives" and slaves from central Africa recruited shortly before by the *dey*.⁷⁸

⁷⁴ See G. Colin, *Corpus des inscriptions arabes et turques de l'Algérie* (Paris, 1901), *passim*; R. Meunier, "Les casernes des Janissaires d'El-Djèzair," *Feuilles d'El-Djèzair*, new series, no. 5 (July 1962): 5–6.

⁷⁵ A. Sacerdoti, "La mission à Alger du consul de Venise Nicolas Rosalem (1753–1754)," *RA* 96 (1952): 87. Following a sudden drop in numbers the sultan's permission was requested to recruit 500 janissaries in Anatolia. See also T. Shuval, *op. cit.*, 64–65.

Table VI. Troops and Janissaries in Algiers according to the sources.

1536	Perez de Idiacayz	2,000 Turks and 7,000-8,000 Andalusian Moors
1587	Laufreducci and Bosio	25,000 soldiers, of which 6,000 janissaries
1605	De Brèves	10,000
1615	Lithgow	6,000
1619	Gramaye	6,000 families of veterans
1621-1626	Mascarenhas	7 barracks with 500-600 men each; 5,000-6,000 in the whole territory, of which 1,000-1,500 in Algiers
1625	Salvago	10,000
1634	Dau	22,000 militia men
1640-1642	De Aranda	12,000
1660	Davity (ed. De Rocoles)	6,000 families
1684	État présent du Royaume	14,000 janissaries
1686	Darcy (Plan d'Alger)	10,000-14,000 men
1719	Gueudeville	12,000
1731	Tollot	13,000-14,000 men (with the majority in Algiers)
1745	<i>Régistres de solde</i>	11,897
1754	Ricaud (cit. Venture de Paradis)	11,000-12,000
1754	Rosalem (ed. Sacerdoti)	4,000
1784	Palermo	3,000
1785 (<i>ante</i>)	Venture	7,000-8,000 altogether, of whom 3,000 in Algiers
1788	Raynal (cit. in Lespès)	10,000 men, of whom 6,000 Turks throughout the Regency
1808	Boutin	10,000(?) in the Regency ("15.000 hommes dont 5.000 Maures dans toute la Régence")
1815	De Grammont	4,000 (from the census of Muhammad Khaznaji)
1830	Gråberg di Hemsö	4,500 "Turks, Ostmanli"
1830	expelled after the French Occupation	3,500

As in the case of the slaves, the highest figures proposed for the troops in Algiers pose the problem of their division between the capital and the other garrisons in the Regency. The European documents do not often make this distinction. In the absence of more precise documentation, the importance of this division, which undoubtedly varied, escapes us. Mascarenhas who was in Algiers between 1621 and 1626 states that only between a third and a sixth of the janissaries were stationed in the city while the rest were stationed in garrisons inland. Venture de Paradis gives an estimate of 3,000 soldiers in the capital out of a total of 7,000 or 8,000 "Turs levantins" throughout the Regency.⁷⁹

Conclusions

So what can be said with a minimum of certainty about the demographic evolution of Algiers in the Ottoman period? Given the present state of our knowledge, the following summary seems possible:

- a) In the period prior to Ottoman rule, even though Algiers was one of the main cities of the central Maghreb, it was quite small physically and demographically. The scarcity of inhabitants seems to be a constant in Algerian territory in the middle ages and the city had a modest population compared with larger cities, such as Fez or Tunis, but also less important cities such as Tilmisân and Qasantîna.
- b) The sixteenth century saw the beginning of the development that would lead the city within a few decades to occupy a prime place, politically, economically and demographically, amongst the capital cities of the central Maghreb. This phenomenon was due to an increase in the population linked to international events (the expulsion of Muslims from the Iberian peninsula), political events (the gradual transformation of Algiers into the provincial capital of the Ottoman Empire and the influx of a Turkish military élite) and economic factors (especially the development of a system of production and distribution of wealth based largely on privateering). Privateering and a series of victorious battles against the Spaniards in the sixteenth century gave Algiers a large number of Christian slaves, a part of which was integrated with the urban population through conversion to Islam.
- c) The absence of data makes it difficult to evaluate the attraction exer-

of Algeria, who remained a minority inside the city, according to the rare sources on the subject.

- d) As far as the built environment is concerned, this was extended in the Ottoman period with the construction of a larger perimeter of walls in the first half of the sixteenth century. Nevertheless, it seems that this enclosed space was insufficient to hold the fresh wave of immigrants, since a new suburb sprang up outside the walls. We don't have any details about the demolition of this suburb, but we can imagine that afterwards its population moved to within the city walls.

For the rest of the Ottoman period the city would remain enclosed within its walls. The stability of its physical dimensions allows us to presume that the demographic pressure was bearable and that there was perhaps the political will to contain the population within limits that were easier to control.

- e) Concerning the immigrant population, we need to make a distinction between different groups. Firstly between Muslims and non-Muslims, and secondly between "eastern" and "western" Muslims. A final immigration of Spanish Muslims took place after 1609 with the expulsion order against the *Moriscos*. Eastern Muslims were essentially composed of Anatolian Turks who made up the backbone of the armed forces; their recruitment was continuous, though variable, over this period, and indeed in decline from the mid eighteenth century onwards.

As far as non-Muslims are concerned, we need to distinguish between Christians and Jews. The latter were present prior to the Ottoman period and their number increased from the beginning of the sixteenth century thanks to the special terms granted them by the new rulers of the city. Their number probably continued to increase with the arrival of immigrants from Italy, though this process is difficult to define; that is, until the beginning of the nineteenth century, when a part of this minority group was expelled or fled the city after acts of violence and massacres.

As far as Christians, especially Christian slaves, are concerned, their number varies considerably, depending on the opportunities for privateering and international, political and military events. The presence of slaves in the population of Algiers was continuous throughout this period, and we can imagine that their number was higher during the city's most prosperous time and that it began to decline after 1638.

Finally, for the last 'imported' group, African slaves, information is scarce and may be summed up in the 1,200 "freemen, slaves and

We can assume that the density of the buildings within the city walls was at a maximum in this period: a form of habitat had developed vertically which is one of the most original features of the city from an architectural and urban-morphological viewpoint, the different typologies of which are still imperfectly known.

- g) In the mid sixteenth century there was a decrease in the population due to various factors, amongst which, in particular, a decrease in the number of slaves due to a reduction in privateering (caused by the losses of the Algerian fleet), changes in navigation techniques and an increase in the ransoming of slaves. This decline was more rapid during epidemics (especially in 1654-57 and 1664) and natural disasters. No documentation allows us to state that these losses were replaced by the local population.
- h) The bombardments, especially of the French fleet in the 1680s, damaged some of the buildings in the capital, though they did not seriously affect the population. They did, however, weaken its political and economic situation with demographic consequences that are difficult to evaluate.
- i) In the course of the next 100 years, until c. 1780, the main nucleus of the population remained fairly stable, with greater losses during natural disasters. The numbers of Christian slaves (accurately recorded from 1736) decreased and probably only comprised a maximum of 4% of the total population. There was a period of slight demographic increase, from 1757 to 1786, when their numbers stabilised around the highest figures of the century, due to several decades of economic growth and political stability.
- j) The gradual political decline of the capital, as part of the general crisis of the Ottoman Empire, is also manifest in a reduction in the number of recruits in the Turkish militia. In the absence of more accurate data, we may surmise that this reduction was a progressive one. No documentation allows us to state, however, that it was compensated for by the recruitment of local auxiliaries, though this cannot be excluded.
- k) If we accept the figures proposed by Venture de Paradis, then we can state that shortly before the plague of 1787 the population of Algiers was c. 50,000 inhabitants.
- l) The years 1787 and 1788 represent a moment of sharp demographic decline: the population was reduced by a third (c. 35,000 inhabitants) due to a plague epidemic.
- m) From the end of the eighteenth century until 1830 the population

Many elements are still lacking that would help define more accurately the demographic evolution of Algiers in the Ottoman period, though, taken as a whole, the available data allow us to go beyond a simple "opinion de confiance"³⁰ and formulate an hypothesis that is perhaps close to the historical reality. Thus Algiers appears to have been an extraordinary phenomenon in the panorama of provincial Arab capitals in the Ottoman Empire, especially in terms of the density of its population: slightly more than 1,100 per hectare around 1780; even more at its demographic peak; between 650 and 750 before the French Conquest in 1830. The overcrowding, especially during the period in which its population was most numerous, must have created terrible living conditions, especially for the poorer strata of society. The spacious mansions, some of which have survived to the present day and so are better known to us, were certainly the exception not the norm.

As far as the documentary sources are concerned, the available data, especially from European sources, can be misleading. Often based on ideological prejudices or falsified for "promotional" reasons that have nothing to do with the quest for historical truth, they nevertheless offer many valid, albeit partial, elements which help enrich our knowledge. Clearly, as with all historical sources, they must be subjected to critical scrutiny. The documents in the Arab and Turkish archives call for a fresh examination which is indeed already underway and should with time provide some of the figures that have so far been lacking.

Finally, any discussion of the demographic evolution of Algiers under Ottoman rule, whether today or in the future, can be based solely on documents and written sources. Some years ago, I completed my first exposition of the subject, confirming that an analysis of the urban fabric of the extant Ottoman city would remedy, at least in part, the shortcomings of the written sources and allow us to understand better its evolution over more than three centuries, thereby making it possible to "establish on a sounder basis the different hypotheses [...] concerning the population and social structure of Algiers in the Turkish period."³¹ Today, these hopes have been dashed. The piles of ruins and rubbish, the void left by demolished or collapsed buildings, the numerous projects